Diploma in the Life Sciences to Degree

Nanyang Polytechnic Diploma in Molecular Biotechnology to Bachelor of Science or Bachelor of Science and Bachelor of Commerce at Murdoch University

www.murdoch.edu.au
Murdoch University, Perth, Western Australia

Murdoch University is located in Perth, the capital city of Western Australia. With a population of some 1.3 million, Perth enjoys a mild Mediterranean climate with warm dry summers and cool wet winters. Perth is Australia’s sunniest capital city and its pleasant climate together with its scenic setting on the Swan River, its white sandy beaches and its tranquil parks provides residents with an opportunity to enjoy outdoor life throughout the year. Perth is Australia’s gateway to South-East Asia. Flights connect Perth with Singapore each day and the two cities share the same time zone. Not surprisingly, Perth has become one of the most popular destinations for migrants, tourists and students from all over the world.

Murdoch University is located approximately 15 kilometres from Perth’s city centre and 8 kilometres from the port of Fremantle. Set on 227 hectares, the campus is landscaped with Australian native flora.

Committed to the pursuit of excellence, Murdoch University has achieved an international reputation for the quality of its teaching and research. Having some of the most qualified academic staff in Australia, Murdoch University has been awarded the coveted five star rating for graduate satisfaction by The Good Universities Guide for five consecutive years.

Over 13% of the student population is comprised of international students from more than 40 different countries and the University prides itself on providing a first class education in a culturally diverse and supportive environment.

The University also places a high priority on ensuring that international students have access to quality accommodation. Student Village, located on the campus provides a friendly community environment, housing more than 500 students from many different backgrounds and cultures.
Biotechnology, Biotechnology/Commerce, Molecular Biology, Biomedical Science, Forensic Biology and Toxicology

Murdoch University was the first University in Australia to initiate a Bachelor of Science degree in Biotechnology and the experience we have gained in teaching biotechnology over more than a decade has resulted in a thorough, relevant and exciting program.

Since that time, Murdoch has developed a special double degree (Bachelor of Science in Biotechnology and Bachelor of Commerce in either Management or Marketing Management).

The University has also established new Bachelor of Science degree programs in Molecular Biology, Biomedical Science and in Forensic Biology and Toxicology.

Nanyang Polytechnic Diplomates in Molecular Biotechnology

Due to a special articulation arrangement, formally approved by Murdoch University, students who have completed the Diploma in Molecular Biotechnology at Nanyang Polytechnic are granted two years of credit towards the Bachelor degrees in Biotechnology, Biotechnology/Commerce, Molecular Biology, Biomedical Science or Forensic Biology and Toxicology at Murdoch University.

You can complete any of the following Bachelor of Science degrees:

- BSc (Biotechnology)
- BSc (Molecular Biology)
- BSc (Biomedical Science)
- BSc (Biomedical Science/Molecular Biology Double Major)
- BSc (Forensic Biology and Toxicology)

in just one year of study.

The double degree (BSc/BCom) majoring in Biotechnology and either Management or Marketing Management can be completed in two and a half years. The double degree will enhance your employability and will provide you with valuable business skills relevant to your career in Biotechnology.

Diploma in Molecular Biotechnology to Bachelor of Science or Bachelor of Science/Bachelor of Commerce

To complete the BSc in Biotechnology, the BSc/BCom in Biotechnology/Commerce or the BSc in Biomedical Science/Molecular Biology, you can commence your study at Murdoch University in either February or July. You are required to enrol in the units shown below:

<table>
<thead>
<tr>
<th>BSc (Biotechnology)</th>
<th>*BSc (Biomedical Science/Molecular Biology Double Major)</th>
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<tbody>
<tr>
<td><strong>Semester 1 (February)</strong></td>
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<tr>
<td>Molecular Biology II</td>
<td>Biomedical Physiology</td>
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<tr>
<td>Business Management Concepts</td>
<td>Mechanisms of Disease</td>
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<tr>
<td>Analytical &amp; Food Chemistry</td>
<td>Molecular Biology II</td>
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<tr>
<td><strong>Semester 2 (July)</strong></td>
<td><strong>Semester 2 (July)</strong></td>
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<tr>
<td>Industrial and Environmental Microbiology</td>
<td><strong>Advances in Medical Science OR Parasitology</strong></td>
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<tr>
<td>Bioprocessing and Food Biotechnology</td>
<td>Biochemistry II</td>
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<tr>
<td>#Elective Unit</td>
<td>Genetics</td>
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* For those wishing to study Biomedical Science, the double major with Molecular Biology is highly recommended, though you can elect to enrol in either of the single majors, Biomedical Science or Molecular Biology, instead.

** Students commencing in July enrol in Parasitology instead of Advances in Medical Science.

# Elective units may be chosen from any program of study within the University. The following electives are recommended:

- Biochemistry II
- Instrumental Analysis
- Mass Spectrometry Based Analysis
- Forensic Science
- Genetics
- Biostatistical Methods
- Industry Practicum
**Double Degree (BSc/BCom)**

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<td>BCom (Management)</td>
<td>BCom (Marketing Management)</td>
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**Semester 1 (February)**
- Principles of Commercial Law
- Introduction to Accounting
- Introduction to Economics
- Molecular Biology II

**Semester 2 (July)**
- Principles of Management
- Industrial and Environmental Microbiology
- Organisation and Management Development

**Semester 1 (February)**
- Analytical and Food Chemistry
- Organisational Theory and Behaviour
- **Entrepreneurship and Small Business Innovation**

**Semester 2 (July)**
- Strategic Management
- Bioprocessing and Food Biotechnology
- Workplace Law

**Semester 1 (February)**
- Management of Human Resources
- Part II Elective Unit

**Semester 2 (July)**
- Consumer Behaviour
- Marketing and Research Analysis
- Part II Elective Unit

**Semester 1 (February)**
- **International Marketing**
- **Electronic Marketing**
- Marketing and Advertising Law

* The sequence of units shown may vary slightly depending on timetabling constraints.

** Alternative Commerce units may be taken instead of the units indicated.

To complete the BSc in Forensic Biology and Toxicology, you need to commence your study at Murdoch University in February. You are required to enrol in the units shown below:

<table>
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<th>BSc (Forensic Biology and Toxicology)</th>
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**Semester 1 (February)**
- Molecular Biology II
- Analytical Chemistry
- *Elective Unit

**Semester 2 (July)**
- Forensic Science
- Forensic Investigation
- Instrumental Analysis

* Microbiology II or Principles of Bioinformatics are recommended Elective units
Honours Year

Provided you have achieved at least a B grade average in your Diploma and you subsequently obtain at least a credit average in the Murdoch units undertaken in the BSc, you will be guaranteed entry into an Honours (research) year of study in Biotechnology, Molecular Biology, Biomedical Science or Forensic Biology and Toxicology provided appropriate supervision is available. This allows you to graduate with a Bachelor of Science with Honours.

Associated with the School of Biological Sciences and Biotechnology and also located at Murdoch University is the Western Australian State Agricultural Biotechnology Centre (SABC), one of the largest and most research-active centres for agricultural biotechnology in Australia. The Centre conducts research into the genetic engineering of crop plants of commercial importance so as to increase their productivity and to enhance their disease-resistance. In association with the Division of Health Sciences, the Centre also conducts research into animal health again using the techniques of microbiology, molecular biology and biochemistry. Many of these projects are available in the SABC as Honours projects for Biotechnology, Molecular Biology and Biomedical Science graduates. Honours projects involving DNA-profiling, toxicology and wildlife forensics are also available.

Links have also been established between the University and the major hospitals in Perth so that students completing the BSc in Biotechnology, Molecular Biology, Biomedical Science or Forensic Biology and Toxicology can undertake an Honours project in areas such as cancer research in association with a hospital research team. These projects provide practical training in the techniques of genetic analysis.
For further information contact:

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